



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,731	01/26/2004	Bruce McKendry	2312.69388	8641

7590 06/05/2006

Patrick G. Burns, Esq.
GREER, BURNS & CRAIN, LTD.
Suite 2500
300 South Wacker Drive
Chicago, IL 60606

EXAMINER

CORRIGAN, JAIME W

ART UNIT	PAPER NUMBER
----------	--------------

3767

DATE MAILED: 06/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/764,731

Applicant(s)

MCKENDRY ET AL.

Examiner

Jaime W. Corrigan

Art Unit

3767

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1-26-04, 4-29-04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 5, 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grant et al. (PN 4,772,262) in view of Ford (PN 5,885,246).

Grant et al. discloses a milk collector unit (See Figure 1 (10)) having a manifold (See Figure 6 (59)), the manifold having a vacuum path (See Figure 6 (46)), the vacuum path having an inlet (See Figure 7 (48)), an outlet (See Figure 6 (62)) and a midsection between said inlet and said outlet, said outlet being connected to a vacuum source (See Figure 1 (12)), a collection vessel operatively connected to said midsection (See Figure 6 (68)) of said vacuum path, and a cup assembly (See Figure 7 (18)), said cup assembly having a housing (See Figure 7 (18)) with an inlet (See Figure 7 (32)) for the breast, and an outlet (See Figure 6 (62)) operatively connected to said inlet of said vacuum path in said manifold, and a vent (See Figure 6 (78)) in said pulsating pressure path providing controlled relief (See Column 6 Lines 46-68, Column 7 Lines 50-68, Column 8 Lines 1-17) of pressure during the positive and negative portions of the pulsation cycle; said cup assembly includes a pad (See Figure 7 (52)) located in the input end of said housing; comprising a hollow boss (See Figure 7 (36))

Art Unit: 3767

which increases the area for breast extension during milk expression; said milk collector unit further includes a removable cap (See Figure 6 (64)), said cup assembly being secured to said milk collector unit by both said manifold (See Figure 6 (59)) and said cap (See Figure 6 (64)); said vacuum path passes through said cap (See Figure 6 (64)) and said manifold (See Figure 6 (59)) to said cup assembly, and said pulsating pressure path passes through said cap to a pressure port (See Figure 6 (46)) in said cup assembly.

Grant et al. fails to disclose a an inwardly and outwardly moving liner and pulsating pressure and said pressure port communicating between said housing and said liner.

Ford teaches that it is conventional in the art to utilize said cup assembly also having a liner (See Figure 1 (6)) in said housing, the vacuum path passing within (See Abstract, Column 2 Lines 28-36) said liner, said liner being secured with respect to said housing to form a space (See Figure 4 (10)) which is in communication with a pulsating pressure path and a pulsating pressure source (See Abstract, Column 4 Lines 61-67, Column 5 Lines 1-11), pressure in said pulsating pressure path alternately pushing said liner inwardly within said housing and pulling said liner outwardly during positive and negative portions of a pulsation cycle (See Abstract, Column 4 Lines 61-67, Column 5 Lines 1-11), respectively and said pressure port being in communication with said space between said housing and said liner (See Abstract, Column 4 Lines 61-67, Column 5 Lines 1-11).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the pulsating liner taught by Ford in the Grant et al. device since it would improve milk breast expression.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grant et al. (PN 4,772,262).

Grant et al. discloses a natural rapid cycle (See Column 2 Lines 16-24).

Grant et al. does not disclose expressly a rate of forty-one to sixty-five pulses per minute.

At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to specify a cyclic rate because Applicant has not disclosed that a rate of forty-one to sixty-five pulses per minute provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the natural rapid cycle because a rate of forty-one to sixty-five pulses per minute is about the natural cyclic rate of a baby sucking.

Therefore, it would have been an obvious matter of design choice to modify Grant et al. to obtain the invention as specified in claim 3.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grant et al. (PN 4,772,262).

Grant et al. discloses the vacuum path varies between about zero to one inches of mercury

Grant et al. does not disclose expressly the vacuum path varies between about one-half inch and five inches of mercury through the pulsation cycle.

At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to increase the vacuum path because Applicant has not disclosed that the vacuum path between one-half inch and five inches of mercury provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the vacuum path varies between about zero to one inches of mercury because it would deliver adequate pressure to perform the same task.

Therefore, it would have been an obvious matter of design choice to modify Grant et al. to obtain the invention as specified in claim 4.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grant et al. (PN 4,772,262) in view of Larsson (PN 5,071,403).

Grant et al. discloses the invention as recited in claim 1 above, however, fails to disclose a filter between the vacuum source and said outlet.

Larsson teaches that it is conventional in the art to utilize a filter (See Column 2 Lines 35-41) between the vacuum source and the said outlet, said filter being substantially permeable to air when dry or wet, and substantially impermeable to liquid, fats and solid components in the milk.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the filter taught by Larsson in the Grant et al. device since it would improve milk hygiene.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grant et al. (PN 4,772,262) in view of Ford (PN 5,885,246).

Grant et al. discloses a milk collector unit (See Figure 1 (10)) having a manifold (See Figure 6 (59)), the manifold having a vacuum path (See Figure 6 (46)), the vacuum path having an inlet (See Figure 7 (48)), an outlet (See Figure 6 (62)) and a midsection between said inlet and said outlet, said outlet being connected to a vacuum source (See Figure 1 (12)), a collection vessel operatively connected to said midsection (See Figure 6 (68)) of said vacuum path, and a cup assembly (See Figure 7 (18)), said cup assembly having a housing (See Figure 7 (18)) with an inlet (See Figure 7 (32)) for the breast, and an outlet (See Figure 6 (62)) operatively connected to said inlet of said vacuum path in said manifold, and a vent (See Figure 6 (78)) in said pulsating pressure path providing controlled relief (See Column 6 Lines 46-68, Column 7 Lines 50-68, Column 8 Lines 1-17) of pressure during the positive and negative portions of the pulsation cycle; said cup assembly includes a pad (See Figure 7 (52))

located in the input end of said housing; comprising a hollow boss (See Figure 7 (36)) which increases the area for breast extension during milk expression; said milk collector unit further includes a removable cap (See Figure 6 (64)), said cup assembly being secured to said milk collector unit by both said manifold (See Figure 6 (59)) and said cap (See Figure 6 (64)); said vacuum path passes through said cap (See Figure 6 (64)) and said manifold (See Figure 6 (59)) to said cup assembly, and said pulsating pressure path passes through said cap to a pressure port (See Figure 6 (46)) in said cup assembly;

Grant et al. fails to disclose a an inwardly and outwardly moving liner and pulsating pressure and said pressure port communicating between said housing and said liner.

Ford teaches that it is conventional in the art to utilize said cup assembly also having a liner (See Figure 1 (6)) in said housing, the vacuum path passing within (See Abstract, Column 2 Lines 28-36) said liner, said liner being secured with respect to said housing to form a space (See Figure 4 (10)) which is in communication with a pulsating pressure path and a pulsating pressure source (See Abstract, Column 4 Lines 61-67, Column 5 Lines 1-11), pressure in said pulsating pressure path alternately pushing said liner inwardly within said housing and pulling said liner outwardly during positive and negative portions of a pulsation cycle (See Abstract, Column 4 Lines 61-67, Column 5 Lines 1-11), respectively and said pressure port being in communication with said space between said housing and said liner (See Abstract, Column 4 Lines 61-67, Column 5 Lines 1-11).

Grant et al. in view of Ford fails to expressly disclose the pulsation rate of forty-one to sixty-five pulses per minute.

Grant et al. discloses a natural rapid cycle (See Column 2 Lines 16-24).

Grant et al. does not disclose expressly a rate of forty-one to sixty-five pulses per minute.

At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to specify a cyclic rate because Applicant has not disclosed that a rate of forty-one to sixty-five pulses per minute provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the natural rapid cycle because a rate of forty-one to sixty-five pulses per minute is about the natural cyclic rate of a baby sucking.

Allowable Subject Matter

Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bachman et al. (PN 5,843,029) and Larsson (PN 4,964,851) disclose similar milk expressing devices.

Any inquiry concerning this communication from the Examiner should be directed to Examiner Jaime Corrigan whose telephone number is (571) 272-4858. The Examiner can normally be reached on Monday – Friday from 8:30 a.m. – 6:00 p.m. 2nd Friday off.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Kevin C. Sirmons, can be reached on (571) 272-4965. The fax number for this group is (571) 273-8300.

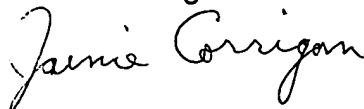
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-3700.

JC

May 17, 2006

Jaime Corrigan



Patent Examiner
Art Unit 3767

KEVIN SIRMONS
PRIMARY EXAMINER

